

WHAT IS CLAIMED IS:

1. An information processing apparatus,  
comprising:

a program processing unit configured to  
execute a program described as an object-oriented  
language executed by a platform-independent machine  
language;

a monitor unit configured to monitor a change  
of a network address of the information processing  
apparatus; and

a reference provision unit configured to  
provide a new network address of the information  
processing apparatus for another information  
processing apparatus when said monitor unit detects  
the change of the network address of the information  
processing apparatus.

2. The information processing apparatus  
according to claim 1,

further comprising:

a remote reference control unit configured to  
create a remote reference representing a location  
address of a server object when the server object is  
generated in the information processing apparatus,  
the remote reference including a network address and

a port number of the information processing apparatus.

3. The information processing apparatus according to claim 2,

wherein said provision unit registers the remote reference in a directory service program in the other information processing apparatus connected to a network, another information processing apparatus referring to the remote reference through the network to access the server object.

4. The information processing apparatus according to claim 3,

when said monitor unit detects the change of the network address of the information processing apparatus,

wherein said remote reference control unit updates the remote reference by using the new network address, and

wherein said provision unit newly registers the updated remote reference in the dictionary service program.

5. The information processing apparatus according to claim 1,

further comprising:

a memory configured to store a class file describing a procedure necessary for another information processing apparatus to process a received object from the information processing apparatus.

6. The information processing apparatus according to claim 5,

wherein said remote reference control unit includes a management unit configured to manage a location address of the class file.

7. The information processing apparatus according to claim 6,

when said monitor unit detects the change of the network address of the information processing apparatus,

wherein said remote reference control unit updates the codebase by using the new network address.

8. The information processing apparatus according to claim 7,

wherein said memory stores a plurality of classes including the class file, and

further comprising:

a class loader configured to store a location address of each of the plurality of classes, when said monitor unit detects the change of the network address of the information processing apparatus,

wherein said class loader updates the location address in the local codebase by using the new network address.

9. The information processing apparatus according to claim 1,

wherein the information processing apparatus is a service terminal executing a server program to provide the service in response to a request from another information processing apparatus as a client's terminal.

10. A method in an information processing apparatus, comprising:

executing a program described as an object-oriented language executed by a platform-independent machine language;

monitoring a change of a network address of the information processing apparatus; and

providing a new network address of the

information processing apparatus for another information processing apparatus when the change of the network address of the information processing apparatus is detected.

11. The information processing method according to claim 10,

further comprising:

creating a remote reference representing a location address of a server object when the server object is generated in the information processing apparatus, the remote reference including a network address and a port number of the information processing apparatus.

12. The information processing method according to claim 11,

further comprising:

registering the remote reference in a dictionary service program in the other information processing apparatus connected to a network, another information processing apparatus referring to the remote reference through the network to access the server object.

13. The information processing method

according to claim 12,

    further comprising:

    when the change of the network address of the information processing apparatus is detected,

    updating the remote reference by using the new network address, and

    registering the updated remote reference in the dictionary service program.

14. The information processing method according to claim 10,

    further comprising:

    storing a class file describing a procedure necessary for another information processing apparatus to process a received object from the information processing apparatus.

15. The information processing method according to claim 14,

    further comprising:

    managing a location address of the class file.

16. The information processing method according to claim 15,

    further comprising:

    when the change of the network address of the

information processing apparatus is detected,  
updating the codebase by using the new network  
address.

17. The information processing method  
according to claim 16,

further comprising:

storing a plurality of classes including the  
class file,

storing a location address of each of the  
plurality of classes, and

when the change of the network address of the  
information processing apparatus is detected,

updating the location address in the local  
codebase by using the new network address.

18. The information processing method  
according to claim 10,

wherein the information processing apparatus is  
a service terminal executing a server program to  
provide the service in response to a request from  
another information processing apparatus as a  
client's terminal.

19. A computer program product, comprising:  
a computer readable program code embodied in

9  
said product for causing an information processing apparatus, said computer readable program code having:

a first program code to execute a program described as an object-oriented language executed by a platform-independent machine language;

a second program code to monitor a change of a network address of the information processing apparatus; and

a third program code to provide a new network address of the information processing apparatus for another information processing apparatus when the change of the network address of the information processing apparatus is detected.